

**Lower Passaic River Restoration Project
Subcontractor Monthly Progress
HydroQual, Inc.**

Reporting Period: 1/23/05 through 01/27/06

Date Submitted: 01/27/06

Submitted By: HydroQual (Paul Anid)

Activities, Progress and Deliverables this Period

Project Documentation

- Submission of progress report.
- Re-Submission of EVs

Project Communications

- Participation on January 24th, 2006 of HydroQual in bi-weekly conference call.
- Consensus on HydroQual's level of effort completed year-to-date with USEPA and Malcolm Pirnie.

Hydrodynamic Modeling

Model Calibration:

- Preparing hydrodynamic reports:
 1. Model-Data calibration procedures:
 1. Plots of model-data comparison:
 - TSI's 1995-1996 time series and transect measurements: elevations, current velocity, temperature and salinity monitoring stations
 - Rutgers' 2000-2002 mooring data: tides, T/S, ADCPs
 - Rutgers' 2004 mooring data: tides, T/S, ADCPs
 2. Statistical analyses for model skill assessment: for data collected in Passaic, Newark Bay and Kills by TSI (1995-1996) and Rutgers (2000-2002 and 2004).
 1. Correlation analyses
 2. Harmonic analyses of tidal elevations and current velocities
 3. Estimation of freshwater budget in Hackensack River Basin
 1. Review of USGS Water Resources Report to estimate the freshwater sources in the basin
 2. Contacted USGS, Meadowland Environmental Commission personnel

Interim Remediation Measure:

- Conference call with Malcolm Pirnie on the progress of the grid extension, and types of scenarios. Expectation that the selection of the scenarios to be modeled will be readied in the next 4 weeks.

Sediment Transport Modeling.

- Arrangement for a conference call or meeting with MPIN to present results and compare work will still need to be initiated next week.
- Flocculation protocol work in progress between Kevin Farley and Bill McAnally.

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Technical or Schedule Problems Encountered this Period and Solutions Implemented

- None

Activities Anticipated Next Period

Project Documentation

- Preparation of progress report.

Project Communications

- Monthly team conference call.

Modeling Plan

- Resumption of the drafting and finalization of the modeling plan, and submission of timeline for final draft early next week.

Hydrodynamic Modeling

- Continuation of report drafting and expectation of a first draft by end of week.

Sediment Transport Modeling

- Arrangements for a combined HQI-MPIN conference call or meeting to discuss solid balance/sedimentation rates calculations.